Biomonitoring Atmospheric Deposition in the Georgia Basin, British Columbia

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Abstract

Deposition of atmospheric nitrogen, sulphur, and metals in the Georgia Basin is being investigated using a biomonitoring approach. The moss, *Isothecium stoloniferum*, and the lichens *Platismatia glauca, Parmelia sulcata*, and *Hypogymnia physodes* were sampled in the summers of 2001 and 2002 at four existing air quality monitoring stations. In addition, two of the four species were collected from about 50 locations distributed throughout the Georgia Basin in summer of 2002 to characterize atmospheric deposition in the Basin.

The moss and lichen samples from air quality monitoring stations will be used to calibrate levels of air pollutants in tissue versus levels in deposition. Nitrogen, sulphur, and metals are being monitored in wet deposition at these stations from November 2001 to December 2002. Canada's National Air Pollution Surveillance program also monitors these variables in particulates at three of these sites. Preliminary results from these tissue and wet deposition analyses will be presented.